

WHAT IS CLAIMED IS:

1. A method for dynamic service scheduling comprising:  
identifying a template specifying a plurality of events;  
determining a plurality of consumer descriptors;  
5 accessing a remote service directory having service descriptors for each of a plurality of services;  
filtering the services from the service directory based on the service descriptors, the events, and the consumer descriptors to determine potential ones of the services for fulfilling the events;  
10 querying each of the potential services for additional service descriptors;  
filtering the potential services based on the additional service descriptors, the events, and the consumer descriptors to determine selected ones of the services for fulfilling the events;  
identifying service links for accessing the selected services;  
15 modifying the template to associate the service links with the events;  
determining whether each of the events in the template has an associated service link; and  
if each of the events in the template has an associated service link, presenting the template for acceptance.  
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2. The method of Claim 1, wherein for each of the potential services, the additional service descriptors comprise a plurality of interface descriptors each identifying a feature of the potential service and a format for interfacing with the feature.  
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3. The method of Claim 2, wherein each of the service links points to a particular feature of the identified service and specifies a command for accessing the particular feature.
- 30 4. The method of Claim 1, wherein the consumer descriptors include global descriptors applicable across multiple templates and dynamic descriptors specifying constraints for one or more of the events.

5. The method of Claim 1, further comprising:  
identifying an additional event based on a query to one of the potential services;  
5 modifying the template to include the additional event;  
accessing the remote service directory;  
filtering the services from the service directory based on the service descriptors, the additional event, and the consumer descriptors to determine potential ones of the services for fulfilling the additional event;  
10 querying each of the potential services for fulfilling the additional event for additional service descriptors;  
filtering the potential services for fulfilling the additional event based on the additional service descriptors, the additional event, and the consumer descriptors to determine one of the services for fulfilling the additional event;  
15 identifying a service link for accessing the determined service for fulfilling the additional event; and  
modifying the template to associate the identified service link with the additional event.
- 20 6. The method of Claim 1, further comprising receiving an acceptance of the template and, in response, accessing each of the selected services using the service links to request performance of the services.
- 25 7. The method of Claim 6, further comprising communicating payment information to at least one of the selected services.
8. The method of Claim 1, wherein the template comprises a text based file.
- 30 9. The method of Claim 1, wherein the template specifies events for a travel itinerary that includes an air transportation event, a lodging event, a ground transportation event, and a plurality of activities.

10. The method of Claim 1, wherein the steps of accessing the remote service directory and querying the potential services each involve communications conforming to a publicly defined protocol.

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11. A consumer system comprising:  
a database storing a template specifying a plurality of events and a plurality of  
consumer descriptors;

an interface operable to communicate with a remote service directory having  
5 service descriptors for each of a plurality of services and to communicate with the  
services; and

an agent operable to access the remote service directory, to filter the services  
from the service directory based on the service descriptors, the events, and the  
consumer descriptors to determine potential ones of the services for fulfilling the  
10 events, to query each of the potential services for additional service descriptors, to  
filter the potential services based on the additional service descriptors, the events, and  
the consumer descriptors to determine selected ones of the services for fulfilling the  
events, to identify service links for accessing the selected services, to modify the  
template to associate the service links with the events, to determine whether each of  
15 the events in the template has an associated service link, and if each of the events in  
the template has an associated service link, to present the template for acceptance.

12. The consumer system of Claim 11, wherein for each of the potential  
services, the additional service descriptors comprise a plurality of interface  
20 descriptors each identifying a feature of the potential service and a format for  
interfacing with the feature.

13. The consumer system of Claim 12, wherein each of the service links  
points to a particular feature of the identified service and specifies a command for  
25 accessing the particular feature.

14. The consumer system of Claim 11, wherein the consumer descriptors  
include global descriptors applicable across multiple templates and dynamic  
descriptors specifying constraints for one or more of the events.

15. The consumer system of Claim 11, wherein the agent is further operable to:

identify an additional event based on a query to one of the potential services;

modify the template to include the additional event;

5 access the remote service directory;

filter the services from the service directory based on the service descriptors, the additional event, and the consumer descriptors to determine potential ones of the services for fulfilling the additional event;

10 query each of the potential services for fulfilling the additional event for additional service descriptors;

filter the potential services for fulfilling the additional event based on the additional service descriptors, the additional event, and the consumer descriptors to determine one of the services for fulfilling the additional event;

15 identify a service link for accessing the determined service for fulfilling the additional event; and

modify the template to associate the identified service link with the additional event.

16. The consumer system of Claim 11, wherein the agent is further operable to receive an acceptance of the template and, in response, to access each of the selected services using the service links to request performance of the services.

17. The consumer system of Claim 16, wherein the agent is further operable to communicate payment information to at least one of the selected services.

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18. The consumer system of Claim 11, wherein the template comprises a text based file.

19. The consumer system of Claim 11, wherein the template specifies events for a travel itinerary that includes an air transportation event, a lodging event, a ground transportation event, and a plurality of activities.

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20. The consumer system of Claim 11, wherein the agent is further operable to access the remote service directory and query the potential services using communications conforming to a publicly defined protocol.

21. Logic for dynamic service scheduling, the logic encoded in media and operable when executed to perform the steps of:

identifying a template specifying a plurality of events;

determining a plurality of consumer descriptors;

5 accessing a remote service directory having service descriptors for each of a plurality of services;

filtering the services from the service directory based on the service descriptors, the events, and the consumer descriptors to determine potential ones of the services for fulfilling the events;

10 querying each of the potential services for additional service descriptors;

filtering the potential services based on the additional service descriptors, the events, and the consumer descriptors to determine selected ones of the services for fulfilling the events;

identifying service links for accessing the selected services;

15 modifying the template to associate the service links with the events;

determining whether each of the events in the template has an associated service link; and

if each of the events in the template has an associated service link, presenting the template for acceptance.

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22. The logic of Claim 21, wherein for each of the potential services, the additional service descriptors comprise a plurality of interface descriptors each identifying a feature of the potential service and a format for interfacing with the feature.

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23. The logic of Claim 22, wherein each of the service links points to a particular feature of the identified service and specifies a command for accessing the particular feature.

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24. The logic of Claim 21, wherein the consumer descriptors include global descriptors applicable across multiple templates and dynamic descriptors specifying constraints for one or more of the events.

25. The logic of Claim 21, further operable when executed to perform the steps of:

- 5 identifying an additional event based on a query to one of the potential services;
- modifying the template to include the additional event;
- accessing the remote service directory;
- filtering the services from the service directory based on the service descriptors, the additional event, and the consumer descriptors to determine potential
- 10 ones of the services for fulfilling the additional event;
- querying each of the potential services for fulfilling the additional event for additional service descriptors;
- filtering the potential services for fulfilling the additional event based on the additional service descriptors, the additional event, and the consumer descriptors to
- 15 determine one of the services for fulfilling the additional event;
- identifying a service link for accessing the determined service for fulfilling the additional event; and
- modifying the template to associate the identified service link with the additional event.

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26. The logic of Claim 21, further operable when executed to perform the steps of receiving an acceptance of the template and, in response, accessing each of the selected services using the service links to request performance of the services.

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27. The logic of Claim 26, further operable when executed to perform the step of communicating payment information to at least one of the selected services.

28. The logic of Claim 21, wherein the template comprises a text based file.

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29. The logic of Claim 21, wherein the template specifies events for a travel itinerary that includes an air transportation event, a lodging event, a ground transportation event, and a plurality of activities.

5           30. The logic of Claim 21, wherein the steps of accessing the remote service directory and querying the potential services each involve communications conforming to a publicly defined protocol.

31. A consumer system comprising:
- means for identifying a template specifying a plurality of events;
  - means for determining a plurality of consumer descriptors;
  - means for accessing a remote service directory having service descriptors for
- 5 each of a plurality of services;
- means for filtering the services from the service directory based on the service descriptors, the events, and the consumer descriptors to determine potential ones of the services for fulfilling the events;
  - means for querying each of the potential services for additional service
- 10 descriptors;
- means for filtering the potential services based on the additional service descriptors, the events, and the consumer descriptors to determine selected ones of the services for fulfilling the events;
  - means for identifying service links for accessing the selected services;
- 15 means for modifying the template to associate the service links with the events;
- means for determining whether each of the events in the template has an associated service link; and
  - means for, if each of the events in the template has an associated service link,
- 20 presenting the template for acceptance.